

IN THE SUPREME COURT OF TENNESSEE  
SPECIAL WORKERS' COMPENSATION APPEALS PANEL  
AT NASHVILLE

November 29, 2006, Session

**JEFFREY L. BARNETT v. CITY OF MURFREESBORO**

**Direct Appeal from the Circuit Court for Rutherford County  
No. 48356 Royce Taylor, Circuit Judge**

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**No. M2005-00275-WC-R3-CV - Mailed - March 10, 2006  
Filed - June 2, 2006**

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This workers' compensation appeal has been referred to the Special Workers' Compensation Appeals Panel in accordance with Tennessee Code Annotated section 50-6-225(e)(3) for hearing and reporting to the Supreme Court our findings of fact and conclusions of law. In this appeal, the Employer asserts that the trial court erred in finding a heart attack suffered by the Employee arose out of his employment with the City of Murfreesboro and in awarding medical benefits for the implantation of intra-coronary stints that the employer alleges is treatment for a pre-existing condition and not a work-related injury. We agree with the findings of the trial judge and, in accordance with Tennessee Code Annotated §50-6-225(e)(2), affirm the judgment of the trial court.

**Tenn. Code Ann. § 50-6-225(e) (1999) Appeal as of Right; Judgment of the Trial Court  
Affirmed.**

DONALD P. HARRIS, SR. J., delivered the opinion of the court, in which CORNELIA A. CLARK, J., and WILLIAM H. INMAN, SR. J., joined.

Richard W. Rucker, Murfreesboro, Tennessee, for appellant, City of Murfreesboro.

Lawrence H. Hart, Nashville, Tennessee, for appellee, Jeffrey L. Barnett.

## MEMORANDUM OPINION

### I. FACTUAL BACKGROUND

Jeffrey L. Barnett, thirty-nine years of age at the time of the trial, began working for the City of Murfreesboro in the city school system in 2001. He was assigned as a member of a yard crew, whose function was maintaining school yards, moving furniture and installing playground equipment. He was made foreman of the yard crew the next year.

On June 3, 2002, he and his crew were moving equipment out of the cafeteria at Mitchell-Neilson Elementary School to enable some remodeling work. The equipment being moved included coolers, stoves, industrial mixers and other items located in the cafeteria. It was an extremely hot day but, because of the remodeling, the power was off and there was no air conditioning. During the course of moving the equipment, he began to feel weak and short of breath, was sweating and had chest pain. He left the school, went back to the shop and later was taken to the emergency room of the Middle Tennessee Medical Center in Murfreesboro. He was diagnosed as having a heart attack and was treated there by Dr. Suresh Saraswat. Mr. Barnett was referred by Dr. Saraswat to Dr. Bjarki J. Olafsson at St. Thomas Hospital where he was taken by ambulance. At St. Thomas Hospital, further testing revealed a severe blockage in the left anterior descending artery which was repaired by the insertion of two intra-coronary stints. Mr. Barnett has been treated by Dr. Saraswat since his release from St. Thomas.

Following the heart attack he was off work six to eight weeks. Mr. Barnett incurred medical expenses totaling \$55,242.17, related to the treatment of his heart condition.<sup>1</sup> After a short period of returning to work on a part-time basis, he resumed his former position at the same rate of pay. Mr. Barnett has work restrictions imposed by his treating physician of taking frequent breaks, lifting no more than seventy pounds and avoiding extreme temperatures. His endurance and strength have been reduced to about half of what they were prior to the heart attack. He regularly experiences chest discomfort from work exertion for which he has been prescribed nitroglycerin tablets. He formerly averaged forty-eight hours per week but has had to discontinue working overtime in order to maintain his strength.

### II. MEDICAL EVIDENCE

Dr. Suresh C. Saraswat, a physician who is certified by both the American Board of Cardiology and the American Board of Internal Medicine, testified by deposition. Dr. Saraswat first saw Jeffrey Barnett on June 3, 2002, in the emergency room at the Middle Tennessee

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<sup>1</sup>The Employer initially paid some workers' compensation benefits. By letter dated October 25, 2002, Mr. Barnett was notified that no further benefits would be paid because his Employer took the position that the heart attack began while he was in the emergency room. As a result, his health care provider, Blue Cross Blue Shield, has paid eighty percent of his medical expenses, leaving twenty percent of the balance to be paid by Mr. Barnett. While the Employer continues to challenge the finding that Mr. Barnett sustained a compensable injury, it has apparently abandoned the position stated in this letter.

Medical Center. Mr. Barnett, who was thirty-six years of age at the time, indicated he was moving some cafeteria furniture and doing other jobs when he started to notice chest discomfort. The pain migrated into the jaw and was accompanied by shortness of breath, sweating, and palpitation. He was brought to the emergency room. An EKG and a blood test were performed and indicated a new heart attack. He was treated with intravenous morphine, a clot buster, heparin, and nitroglycerine. Mr. Barnett was also given aspirin, beta blockers and a medication called altace, and ACE inhibitor, all standard treatment for a heart attack.

Mr. Barnett denied any history of high blood pressure or previous heart attack. He reported a family history of heart problems in that his mother had a heart attack in her mid-sixties but was doing fine at about the age of seventy. Dr. Saraswat's diagnosis was a new heart attack and borderline high blood pressure. The diagnosis was confirmed at St. Thomas Hospital where further testing revealed a blockage of the main artery.

Dr. Saraswat indicated that the work Mr. Barnett was performing and the extreme heat could have been contributing factors to his heart attack. The underlying situation, the formation of plaque in the lining of his arteries, pre-existed. When that lining is damaged, it causes a blockage of the artery. According to Dr. Saraswat, this can happen spontaneously or be caused by physical or emotional stress. Stress increases the release of substances into the body that increase blood pressure. The physical stress and extreme heat could have increased Mr. Barnett's blood pressure which, combined with his other risk factors, might have precipitated the heart attack. A heart attack can result from the dramatic increase in the force of blood washing over the plaque in one's arteries. Dr. Saraswat acknowledged that smoking also increases the risk of having such a blockage. Mr. Barnett was a smoker. In Dr. Saraswat's opinion, the unusually heavy labor and extreme heat more likely than not added to Mr. Barnett's underlying problems that resulted in the heart attack suffered by him.

Dr. Saraswat testified that an arteriogram, administered at St. Thomas Hospital indicated he had an eighty to ninety percent blockage in the artery supplying the front of the heart. According to the note from St. Thomas, the clot was pushed to the side and reduced to zero and he was given two stints to keep the arteries open.

Dr. Saraswat released Mr. Barnett to return to work on a part-time basis, six hours per day, on July 29, 2002. In September 2002, he was allowed to return to his regular work for eight hours per day. Dr. Saraswat imposed restrictions of lifting no more than seventy-five pounds and avoiding extreme temperatures. Mr. Barnett has been prescribed preventive medications: beta blockers, ACE inhibitors, and aspirin. The purpose of these medications is to prevent a second heart attack by improving his heart size and keeping it from further enlargement, reducing the chances of his having shortness of breath, and reducing other complications which go with enlargement of the heart. Dr. Saraswat opined that Mr. Barnett would require future medical treatment.

Dr. Bjarki J. Olafsson, also certified by both the American Board of Cardiology and the American Board of Internal Medicine, testified by deposition. On a referral by Dr. Saraswat, he saw Jeffrey Barnett in June 2002 after he had suffered the heart attack. Dr. Olafsson administered an arteriogram and found a severe blockage in the main artery above the heart, the left anterior descending artery. This blockage was repaired by inserting two stints. Dr. Olafsson also discovered the heart muscle had been damaged by the heart attack with some impairment of strength and permeability.

According to Dr. Olafsson, Mr. Barnett suffered from coronary atherosclerosis or hardening of the arteries with plaque buildup. At the time of an actual heart attack, there is usually a rupture of the plaque which causes a clot formation that abruptly stops the flow of blood to the heart muscle and causes a heart attack. According to Dr. Olafsson, Mr. Barnett's atherosclerotic disease was not the result of work. Barnett had a family history for atherosclerosis, a poor cholesterol profile<sup>2</sup>, and had smoked for some time, all risk factors for the development of atherosclerosis.

According to Dr. Olafsson, the type of work that Mr. Barnett was doing did not cause the atherosclerotic disease and he would most likely have needed the stints inserted had the atherosclerotic condition been discovered by some means other than having a heart attack. The blockage observed by Dr. Olafsson was ninety-nine percent. Prior to time he suffered the heart attack, it might have been less than that, but there was certainly a significant blockage. In the absence of marked change in lifestyle and risk factor modifications, it would have surfaced sooner or later.

In Dr. Olafsson's opinion the physical lifting and the conditions under which Mr. Barnett was working more likely than not triggered the heart attack although it could not be said with absolute certainty. Dr. Olafsson described a triggering event as an event that causes something to occur that otherwise might not take place at the particular moment.

Dr. Olafsson also testified that the treatment in the emergency room in Murfreesboro was geared directly to the heart attack. The treatment at St. Thomas Hospital was geared towards both. He had suffered a heart attack when he arrived at St. Thomas. He had a damaged heart muscle and an underlying condition that if left untreated would lead to another heart attack. Dr. Olafsson also testified Mr. Barnett's condition would require future medical treatment.<sup>3</sup> Dr.

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<sup>2</sup> His good cholesterol was low and his bad cholesterol, the LDL, was somewhat elevated.

<sup>3</sup> According to Dr. Olafsson, the future treatment that Mr. Barnett will require are both for the atherosclerotic disease and the heart attack. For the atherosclerotic disease, Mr. Barnett's treatment will be largely prophylactic therapy. He should be encouraged not to start smoking again. His cholesterol profile needs to be watched. His diet needs to be modified or optimized and he may need medications to help him with the cholesterol profile. Any medication prescribed to lower the cholesterol level would be addressing atherosclerotic disease. As a result of the heart attack, his heart has been damaged and there is a certain degree of weakening to the heart muscle requiring medications that he is already taking. One belongs to a group of medications called ACE inhibitors, or angiotensin-converting enzyme inhibitors, that

Olafsson did not disagree with Dr. Wheelhouse's impairment rating of 15% to the body as a whole.

Dr. David Hansen, a cardiologist, certified by the American Board of Medical Examiners, the American Board of Internal Medicine and the American Board of Internal Medicine Cardiovascular Disease, testified by deposition. He is an Associate Professor of Medicine at the Vanderbilt University School of Medicine, Division of Cardiology. Dr. Hansen reviewed the records of treatment of Jeffrey Barnett, including the depositions of Dr. Saraswat and Dr. Olafsson, and the records of treatment from Middle Tennessee Medical Center.

From these records, Dr. Hansen concluded that Jeffrey Barnett suffered an acute myocardial infarction which, in laymen's terms, is a heart attack. According to Dr. Hansen, the underlying cause of the heart attack was coronary atherosclerosis. While Mr. Barnett's heart attack had its onset at work, the underlying coronary condition responsible for him having a heart attack took years to develop. The build up of fat and cholesterol in the arteries is progressive. Heart attacks occur when a plaque of cholesterol build-up in a coronary artery becomes venerable and ruptures. Not infrequently, those events occur in people where there is no real environmental or external cause that one can determine. At the moment the plaque ruptures, it unleashes a cascade of events that lead to blood clot formation at the site of the ruptured plaque. If that build up of blood clot is sufficient to totally obstruct the artery, then one ends up with a cessation of blood flow down the artery and that causes the heart attack to occur.

On the day of Mr. Barnett's heart attack, he was at work in an environment where he was engaged in heavy lifting in an extremely hot temperature. According to Dr. Hansen, the work environment and the task at hand did not cause the heart attack, but rather the fact that Mr. Barnett had a venerable plaque that chose that moment to rupture. If it had not ruptured at that moment, it was prone to rupture some time soon. It is also possible that his coronary artery disease might still be undiscovered but for the heart attack.

Dr. Hansen testified that he couldn't disprove that heavy work on a hot day played some role in the creation of this particular heart attack. It would not be possible for him to say that to a degree of medical certainty. When one does heavy work, it raises blood pressure and that blood pressure increases the force of the blood striking the venerable plaque. That increased force on the venerable plaque certainly can play a role in the rupture of that plaque. It is also known that working in a hot environment causes one to sweat and become dehydrated. As one does so, it tends to concentrate the blood clotting factors in the blood and might make one more prone to blood clot formation. Dr. Hansen re-emphasized that it cannot be known whether those factors played any role in this particular heart attack.

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have been shown to strengthen the heart or maintain the strength of the heart after a heart attack and hopefully prevent a further decline in heart function. Mr. Barnett has also been prescribed a beta blocker which has been shown to stabilize heart rhythm and keep a heart condition stable after a heart attack.

Dr. Hansen testified that the primary problem with a heart attack is the blood clot formation in the artery. The treatment Mr. Barnett received in the emergency room was the administration of a blood clot dissolving medication. After the blood clot was dissolved, the underlying plaque in the artery still existed because clot dissolving medication does not do anything to the underlying plaque. After a heart attack, most patients have coronary arteriography to determine where the blockage is and how severe the remaining blockage is after the clot dissolving medication has been given. In Barnett's case, Dr. Olafsson discovered a residual eighty to ninety blockage of his left anterior descending coronary artery. To relieve that residual obstruction after the blood clot dissolving medicine had done its work, an intra-coronary stint was placed. What Dr. Olafsson was treating at the moment he put the stint in was not the heart attack, according to Dr. Hansen, but rather the pre-existing coronary atherosclerosis.

Dr. Hansen opined that Mr. Barnett has a 10-15% impairment according to the American Medical Association Guidelines. His opinion was based on Mr. Barnett's having suffered an acute myocardial infarction but with good residual heart function.

The C-32 Standard Form Medical Report for Industrial Injuries prepared by Dr. Walter Wheelhouse was admitted into evidence. Dr. Wheelhouse is an orthopaedic surgeon certified by the American Board of Orthopaedic Surgeons. According to Dr. Wheelhouse, Mr. Barnett will sustain a 15% whole body impairment as a result of his heart attack. Dr. Wheelhouse also opined that the injury arose out of Mr. Barnett's employment. He imposed restrictions on lifting fifty pounds or more, standing more than six hours per day, sitting more than six hours per day, and limited pushing and pulling seventy-five pounds or more. He also indicated that Mr. Barnett should not be exposed to extreme temperatures.

### III. RULING OF THE TRIAL COURT

The trial court found that Mr. Barnett's heart attack arose as a result of his employment. Specifically, the trial judge was of the opinion work exertion and heat conditions likely triggered a plaque release which caused Mr. Barnett's heart attack. As a result of that injury, the court found Mr. Barnett to have sustained a 15% permanent impairment to the body as a whole and a 37.5% vocational disability. The trial court held the City of Murfreesboro responsible for the treatment for the underlying disease in that the underlying disease had to be treated as a result of the heart attack. Finally, the trial court found the City of Murfreesboro would be responsible for future medical expenses arising out of the heart attack but not those related to treatment of the underlying condition.

### IV. SCOPE OF REVIEW

On this appeal, the standard of review is provided for by the legislature in Tennessee Code Annotated section 50-6-225(e)(2) as follows: "Review of findings of fact by the trial court shall be de novo upon the record of the trial court, accompanied by a presumption of the correctness of the finding, unless the preponderance of the evidence is otherwise." Where

credibility and weight to be given testimony are involved, considerable deference is given the trial court when the trial judge had the opportunity to observe the witness' demeanor and to hear in-court testimony. *Long v. Tri-Con Indus., Ltd.*, 996 S.W.2d 173, 178 (Tenn. 1999). Where the issues involve expert medical testimony that is contained in the record by deposition, determination of the weight and credibility of the evidence necessarily must be drawn from the contents of the depositions and the reviewing court may draw its own conclusions with regard to those issues. *Orman v. Williams Sonoma, Inc.*, 803 S.W.2d 672, 676 (Tenn. 1991).

## VI. ANALYSIS

On this appeal, the appellant, City of Murfreesboro, raises essentially two issues. The first is whether the trial erred in finding Mr. Barnett's heart attack to be a compensable injury, that is, whether it was precipitated by the heavy lifting and extreme heat experienced by Mr. Barnett at the time the heart attack occurred. The second issue is whether the trial court erred in finding the Appellant responsible for the medical treatment provided Mr. Barnett at St. Thomas Hospital that Appellant alleges was related solely to treating Mr. Barnett's pre-existing atherosclerosis.

It is well settled in this state that an employee's death or disability resulting from a heart attack that is causally related to his employment is compensable under the worker's compensation act as arising out of and in the course of his employment although, prior to the attack, he suffered from heart disease and although the attack was produced by only ordinary exertion and the usual strain of the employee's work. *King v. Jones Truck Lines*, 814 S.W.2d 23, 27 (Tenn. 1991); *Flowers v. S. Cent. Bell Tel. Co.*, 672 S.W.2d 769, 770 (Tenn. 1984). If the physical activity and exertion of an employee's work aggravates a pre-existing heart condition, precipitates a heart attack, and causes injury, any ensuing disability is the result of accident arising out of and in the course of the employment within the meaning of our workers' compensation laws. *King*, 814 S.W.2d at 27-28, *Coleman v. Coker*, 321 S.W.2d 540, 541 (Tenn. 1959). This principle is based upon an equally well-settled principle that an employer takes the employee together with any defects or pre-existing afflictions the employee may have. *Id.*; *Swift & Co. v. Howard*, 212 S.W.2d 388, 391 (Tenn. 1948). Thus, an employer is said to assume the risk of having an employee's weakened condition aggravated by some work-related injury which might not hurt or bother a perfectly normal, healthy person. *Id.*

In the present case, both Drs. Saraswat and Olafsson recognized that Mr. Barnett's underlying condition, atherosclerosis, or hardening of the arteries, was not work related but held the opinion that his heart attack was more likely than not precipitated or triggered by the heavy exertion and extreme heat that Mr. Barnett was experiencing at the time it occurred. Dr. Hansen was of the opinion these environmental factors could have precipitated the heart attack. The testimony of any of these physicians would support a finding the heart attack was work-related under our existing case law. See, *Luedtke v. Travelers Insurance Company*, 100 S.W.3d 188, 192 (Tenn. 2000) (holding that medical testimony that the exertion at work could have caused the heart attack was sufficient for a finding of compensability); *Reeser v. Yellow Freight Sys., Inc.*,

938 S.W.2d 690 (Tenn. 1997) (holding medical testimony that the stress of driving through an ice storm could have precipitated a stroke was similarly sufficient.) In view of the foregoing, we agree with the finding of the trial court that Mr. Barnett's heart attack arose out of his employment.

The next issue is whether the employer should be held liable for the medical treatment rendered to Mr. Barnett at St. Thomas Hospital involving, primarily, the implantation of two intra-coronary stints which the appellant asserts relates solely to the treatment of Mr. Barnett's underlying atherosclerosis. While this issue is perhaps more troublesome, we are of the opinion that it also is without merit. Dr. Olafsson, who performed the procedure at St. Thomas Hospital, testified the procedure was both to treat the heart attack and the underlying condition. Indeed, while Dr. Olafsson was not asked about it, the notes from St. Thomas, according to the testimony of Dr. Saraswat, indicated a portion of the clot still existed at the time of the procedure, was pushed to the side and reduced to zero. Dr. Olafsson testified that while Mr. Barnett certainly had a significant blockage of the artery prior to the heart attack, it may have increased as a result of the heart attack. Dr. Olafsson also suggested that the coming to surface of the atherosclerosis might have been delayed by a marked change in Mr. Barnett's lifestyle and management of his risk factors. Even Dr. Hansen testified that Mr. Barnett's coronary artery disease might be undiscovered at the present time absent the heart attack.

We, therefore, conclude that the treatment Mr. Barnett received at St. Thomas Hospital was, at least in part, related to the heart attack which has been determined to be a work-related injury. Even if consideration of the treatment is isolated to implantation of the stints, the blockage that was being corrected by that procedure could have been made worse by the heart attack. Clearly, the necessity of the procedure was advanced in time as a result of the heart attack. Under these circumstances, treatment for a work-related injury and a pre-existing condition will not be apportioned. See, e.g., *McCormick v. Snappy Car Rentals*, 806 S.W.2d 527, 530 (Tenn. 1991) (holding the rule prohibiting apportionment of benefits "applies whether the subsequent injury aggravates or merely combines with a previous injury or condition of the employee."). The trial court correctly awarded Mr. Barnett medical benefits for the treatment received by him at St. Thomas Hospital.

## V. CONCLUSION

Because we agree with the trial court's findings that the heart attack suffered by the Appellee arose out of his employment and that, as a result of this injury, the Employer was liable for the medical treatment provided him by Dr. Olafsson and St. Thomas Hospital, the judgment of the trial court is affirmed. The costs of this cause shall be taxed to the City of Murfreesboro.

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DONALD P. HARRIS, SR. J.

IN THE SUPREME COURT OF TENNESSEE  
AT NASHVILLE  
November 29, 2006 Session

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**Circuit Court for Rutherford County  
No. 48356**

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**No. M2005-00275-WC-R3-CV - Filed - June 2, 2006**

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**JUDGMENT**

This case is before the Court upon the motion for review filed by the City of Murfreesboro pursuant to Tenn. Code Ann. § 50-6-225(e)(5)(B), the entire record, including the order of referral to the Special Workers' Compensation Appeals Panel, and the Panel's Memorandum Opinion setting forth its findings of fact and conclusions of law.

It appears to the Court that the motion for review is not well-taken and is therefore denied. The Panel's findings of fact and conclusions of law, which are incorporated by reference, are adopted and affirmed. The decision of the Panel is made the judgment of the Court.

Costs are assessed to the City of Murfreesboro, for which execution may issue if necessary.

CLARK, J., NOT PARTICIPATING